

**[0056]** The present invention is drawn to a network device configured to prevent data misalignment of a data packet containing extra header bytes. The network device includes an ingress module having an input interface to receive data. A header detector configured to detect the header bytes of the cell and remove the header from the cell of the data packet is also provided on the network device. A counter determines whether the cell of the data packet contains a multiple of a predetermined bytes. If the counter determines that the cell of the data packet does not satisfy the multiple of the predetermined bytes, an insertion module inserts null bytes into the cell of the data packet to form a modified cell of the data packet. Then, an extraction module removes the null bytes from the modified cell of the data packet when the modified cell exits the network device.